

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-012466**Date Inspected:** 03-Mar-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Chen Xi.**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Shailesh Wadkar was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

Bay 1:

This QA Inspector observed the following work in progress:

Flux Cored Arc Welding (FCAW) of OBG component – Traveler Rail; weld joint 20TR1-019 – 003. Welder is identified as 219188. ZPMC Quality Control (QC) is identified as Yong Fu Zhi. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-2231-TC-U5-1G.

FCAW of OBG component – Traveler Rail; weld joint 20TR1-035 – 003. Welder is identified as 215397. ZPMC Quality Control (QC) is identified as Liu Yang Hai. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-2231-TC-U5-1G.

CB 15:

During random inprocess inspection of this Cross Beam (CB), this QA Inspector observed ZPMC personnel performing repair welding of weld joint number CB202A-015-002. Welder was identified as 067611. Welding

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

process was identified as Shielded Metal Arc Welding (SMAW). WPS-345-SMAW-2G (2F)-Repair, was used as per Welding Repair Report (WRR) B-WR 9676 R-0. ZPMC Quality Control (QC) is identified as Xiang Feng. As per UT (Ultrasonic Testing) report (NO: B787-UT-10433) for this weld, thirteen (13) locations on this weld were identified for repair to be done.

Bay6: CB9.

This QA Inspector observed that no significant work was being performed on this CB at the time when this QA was present.

Outside Yard:

CB8, CB13, CB10, CB11, CB16, CB12 & CB14:

This QA Inspector observed that no significant work was being performed on the above mentioned CB's at the time when this QA was present.

Bay 15:

CB5:

During random inprocess inspection of this Cross Beam (CB), this QA Inspector observed ZPMC performing repair welding of weld no: CB202-005-016. Welder was identified as 062092. ZPMC QC identified as Mr. Li Yang & Mr. Weng Jian. This material is designated as Seismic Performance Critical Member (SPCM). Material thickness is 14mm. Welding process was identified as SMAW.

However, this QA Inspector observed that this repair welding is done without WRR. This QA informed ZPMC Quality Control (QC) identified as Mr. Weng Jian and American Bridge Fluor (ABF) QA identified as Mr. Weng Weng of this issue and that an incident report would be generated. Earlier in this day, ZPMC QC Mr. Weng Jian agreed to ensure the availability of WRR for this location to be welded.

For details, refer attached photos.

During random inprocess inspection of this Cross Beam (CB), this QA Inspector observed ZPMC personnel performing base metal repair welding of the areas from where temporary supports / fixtures were removed. This QA verified the WRR (No: B-WR10664 Rev-0) used for this welding / repair activity. Welder was identified as 062092. Welding process was identified as SMAW as per WPS: 345-SMAW-1G (1F)-FCM-Repair-1 & WPS: 345-SMAW-2G (2F)-FCM-Repair-1. ZPMC QC personnel was identified as Wang Jian.

CB6:

This QA Inspector observed that no significant work was being performed on this CB at the time when this QA was present.

Trial Assembly:

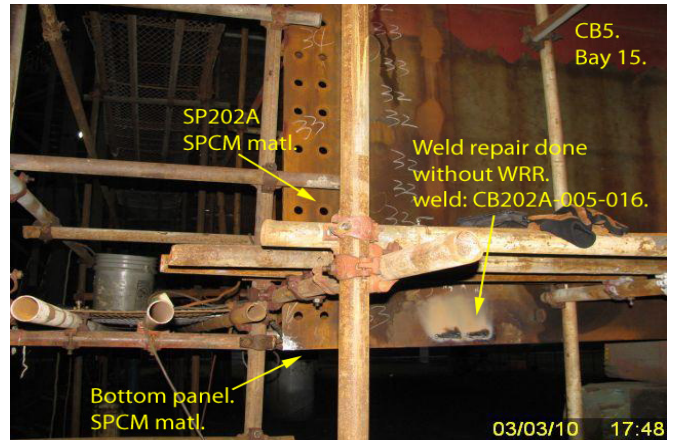
CB7:

This QA Inspector observed that no significant work was being performed on this CB at the time when this QA was present.

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang; phone: 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Wadkar,Sailesh	Quality Assurance Inspector
Reviewed By:	Hall,Steven	QA Reviewer
